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10/735,382	12/12/2003	Eugene Luskin	MSI-1725US	1704
22801	7590	05/22/2007	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			WEISKOPF, MARIE	
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			3661	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhptoms@leehayes.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/735,382	<b>Applicant(s)</b> LUSKIN ET AL.	
	<b>Examiner</b> Marie A. Weiskopf	<b>Art Unit</b> 3661	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

1. Claims 1, 2, 4, 6-13, 15, 17-24, 26, 28, 29, 31-38, 40, and 43-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirane et al. (US 5,491,631) in view of Borugian (US 6,701,231).

a. Per claim 1, Shirane teaches a method including generating an explanation of a vehicle condition based on a vehicle diagnostics code comprising a set of symbols (column 12, lines 20-36). Shirane does not teach that the computer is maintained on the vehicle, or combining data collected from

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the vehicle with the diagnostic data. Bourgian teaches an onboard computer which determines whether there are fault codes or if planned maintenance is required. The system then informs the driver that there are repairs or scheduled maintenance and allows the driver to opt towards scheduling an appointment or not. Although Shirane doesn't disclose the diagnostic system onboard the vehicle, it would have been obvious to one having ordinary skill in the art at the time of the invention to include the teachings of Bourgian in order to provide the driver of an alert that there is need for repair or maintenance with information from a plurality of systems and collect the data on a computer maintained in the vehicle, as taught by Bourgian. (Column 15, lines 35-60) It would have been obvious to one of ordinary skill in the art, at the time of invention, to collect data on-board a vehicle, where it is generated, as illustrated in the system taught by Bourgian, and further, to associate data from systems collected on the vehicle with the diagnostic data, as also illustrated by Bourgian, in order to assist with the repair of the vehicle through analysis of historical data.

b. Per claim 2, Shirane teaches including a textual explanation (see figure 9b).

c. Per claim 4, Shirane teaches generating supplemental information related to the vehicle diagnostics code (column 18, line 65 – column 19, line 10).

d. Per claim 7, Shirane teaches that the system may be connected to a personal computer (column 8, lines 61-67).

e. Per claim 8, Shirane teaches that the presenting may be performed at the vehicle (column 8, lines 14-23).

f. Per claims 9 and 11, Shirane teaches sending the diagnostic information to a remote computer (column 8, lines 64-67).

g. Per claim 10, Shirane teaches receiving updated information from the remote host (column 9, lines 1-4).

h. Per claim 12, Shirane teaches a computer implemented method including generating a deciphered explanation of a vehicle diagnostics code (column 12, lines 20-36). Shirane does not teach that the computer is maintained on the vehicle, or combining data collected from GPS sensors with the diagnostic data. Bourgian teaches an onboard computer which determines whether there are fault codes or if planned maintenance is required. The system then informs the driver that there are repairs or scheduled maintenance and allows the driver to opt towards scheduling an appointment or not. Although Shirane doesn't disclose the diagnostic system onboard the vehicle, it would have been obvious to one having ordinary skill in the art at the time of the invention to include the teachings of Bourgian in order to provide the driver of an alert that there is need for repair or maintenance with information from a plurality of systems and collect the data on a computer maintained in the vehicle, as taught by Bourgian. Further, Bourgian discusses using a GPS system. (Column 15, lines 34-60) It would have been obvious to one of ordinary skill in the art, at the time of invention, to collect data on-board a vehicle, where it is generated, as illustrated in the system taught by Bourgian, and further, to associate data from systems collected on the vehicle with the diagnostic data, as also illustrated by

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Bourgian, in order to assist with the repair of the vehicle through analysis of historical data.

i. Per claim 13, Shirane teaches including a textual explanation (see figure 9b).

j. Per claim 15, Shirane teaches generating supplemental information related to the vehicle diagnostics code (column 18, line 65 – column 19, line 10).

k. Per claim 18, Shirane teaches that the system may be connected to a personal computer (column 8, lines 61-67).

l. Per claim 19, Shirane teaches that the presenting may be performed at the vehicle (column 8, lines 14-23).

m. Per claims 20 and 22, Shirane teaches sending the diagnostic information to a remote computer (column 8, lines 64-67).

n. Per claim 21, Shirane teaches receiving updated information from the remote host (column 9, lines 1-4).

o. Per claim 23, Shirane teaches a computer generating a deciphered explanation of a vehicle diagnostics code (column 12, lines 20-36). Shirane does not teach that the computer is maintained on the vehicle, or combining data collected from the vehicle with the diagnostic data. Bourgian teaches an onboard computer which determines whether there are fault codes or if planned maintenance is required. The system then informs the driver that there are repairs or scheduled maintenance and allows the driver to opt towards scheduling an appointment or not. Although Shirane doesn't disclose the

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diagnostic system onboard the vehicle, it would have been obvious to one having ordinary skill in the art at the time of the invention to include the teachings of Bourgian in order to provide the driver of an alert that there is need for repair or maintenance with information from a plurality of systems and collect the data on a computer maintained in the vehicle, as taught by Bourgian. (Column 15, lines 35-60) It would have been obvious to one of ordinary skill in the art, at the time of invention, to collect data on-board a vehicle, where it is generated, as illustrated in the system taught by Bourgian, and further, to associate data from systems collected on the vehicle with the diagnostic data, as also illustrated by Bourgian, in order to assist with the repair of the vehicle through analysis of historical data.

p. Per claim 24, Shirane teaches including a textual explanation (see figure 9b).

q. Per claim 26, Shirane teaches generating supplemental information related to the vehicle diagnostics code (column 18, line 65 – column 19, line 10).

r. Per claim 29, Shirane (27, figure 1) and Bourgian (20, Figure 1) teach a display

s. Per claim 31, Shirane teaches sending the diagnostic information to a remote computer (column 8, lines 64-67).

t. Per claim 32, Shirane teaches receiving updated information from the remote host (column 9, lines 1-4).

u. Per claim 33, Shirane teaches a vehicle-based system including a diagnostics receiver module receiving a vehicle diagnostics code from a vehicle diagnostics system and a means for generating an explanation of the vehicle

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condition based on the vehicle diagnostics code (column 12, lines 20-36).

Shirane does not teach one or more interfaces, or combining data collected from the vehicle with the diagnostic data. Bourgian teaches an onboard computer which determines whether there are fault codes or if planned maintenance is required. The system then informs the driver that there are repairs or scheduled maintenance and allows the driver to opt towards scheduling an appointment or not. Although Shirane doesn't disclose the diagnostic system onboard the vehicle, it would have been obvious to one having ordinary skill in the art at the time of the invention to include the teachings of Bourgian in order to provide the driver of an alert that there is need for repair or maintenance with information from a plurality of systems and collect the data on a computer maintained in the vehicle, as taught by Bourgian. (Column 15, lines 35-60) It would have been obvious to one of ordinary skill in the art, at the time of invention, to collect data on-board a vehicle, where it is generated, as illustrated in the system taught by Bourgian, and further, to associate data from systems collected on the vehicle with the diagnostic data, as also illustrated by Bourgian, in order to assist with the repair of the vehicle through analysis of historical data.

v. Per claim 34, Shirane teaches a computer-readable memory storing an information registry having a field storing a reference to the explanation (column 12, lines 14-16).

w. Per claim 35, Shirane teaches a memory storing explanations of one or more diagnostic codes (column 12, lines 16-19).



x. Per claim 36, Shirane teaches including a textual explanation (see figure 9b).

y. Per claim 37, Shirane teaches communicating the explanation over a network (column 8, lines 66-67).

z. Per claim 38, Shirane teaches a display (27, figure 1).

aa. Per claim 40, Shirane teaches receiving updated information from the remote host (column 9, lines 1-4).

bb. Per claim 43, Shirane teaches a method including receiving a vehicle diagnostics code from a vehicle diagnostics system including a set of one or more symbols corresponding to vehicle condition and retrieving an explanation of the vehicle condition based on the diagnostics code (column 12, lines 20-36). Shirane does not teach that the computer is maintained on the vehicle, or combining data collected from the vehicle with the diagnostic data. Bourgian teaches an onboard computer which determines whether there are fault codes or if planned maintenance is required. The system then informs the driver that there are repairs or scheduled maintenance and allows the driver to opt towards scheduling an appointment or not. Although Shirane doesn't disclose the diagnostic system onboard the vehicle, it would have been obvious to one having ordinary skill in the art at the time of the invention to include the teachings of Bourgian in order to provide the driver of an alert that there is need for repair or maintenance with information from a plurality of systems and collect the data on a computer maintained in the vehicle, as taught by Bourgian. (Column 15, lines 35-60) It would have been obvious to one of ordinary skill in the art, at the time of

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invention, to collect data on-board a vehicle, where it is generated, as illustrated in the system taught by Bourgian, and further, to associate data from systems collected on the vehicle with the diagnostic data, as also illustrated by Bourgian, in order to assist with the repair of the vehicle through analysis of historical data.

cc. Per claims 44 and 45, Shirane teaches receiving updated information from a remote host (column 9, lines 1-4).

dd. Per claim 46, Shirane teaches the explanation is presented automatically (see figure 9b).

ee. Per claim 47, Shirane teaches presenting an explanation in response to a request from a user (column 12, lines 37-44).

ff. Per claim 48, Shirane teaches communicating the explanation over a network (column 8, lines 66-67).

gg. Per claims 6, 17, and 28, Bourgian teaches a vehicle diagnostic system that retrieves a location of a vehicle dealership (Column 15, lines 42-60). It would have been obvious to one of ordinary skill in the art, at the time of invention, to retrieve a location of a vehicle dealership in the system of Shirane, in order to make the repair of the vehicle easier for the user, as taught by Bourgian.

2. Claims 3, 14, 25, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shirane and Bourgian in view of Wellman et al. (US006212449B1).

a. Per claims 3, 14, and 25, the combination teaches the invention as explained in the rejection of claims 1, 12, and 23. The combination does not

teach providing a graphical illustration of the component associated with the diagnostic code. Wellman teaches a method for diagnosing malfunctions in a vehicle that in addition to a textual description, also provides a graphical illustration of the faulty component, in order to aid the user in locating and repairing the component (column 8, lines 29-56). It would have been obvious to one of ordinary skill in the art, at the time of invention, to include a graphical illustration of the faulty component, in order to aid the user in locating and repairing the component, as taught by Wellman.

b. Per claim 41, the combination teaches the invention as explained in the rejection of claim 34. The combination does not teach the specific fields listed in claim 41. However, the fields listed are general to the art of vehicle diagnostic systems. A typical diagnostic system will indicate the severity of a fault, the faulty component, and a type of fault (see for example Shirane figure 7). Furthermore, Wellman teaches automatically generating a graphical illustration of the faulty component (column 8, lines 29-56). It would have been obvious to one of ordinary skill in the art, at the time of invention, to indicate these features in the diagnostic codes of the system, as is well known in the art.

3. Claims 5, 16 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shirane and Bourgian in view of Moore (US 6,370,454).

a. Per claims 5, 16, and 27, Moore teaches a vehicle diagnostic system that retrieves an estimated price for repairing a condition related to a diagnostic code (see figure 6). It would have been obvious to one of ordinary

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skill in the art, at the time of invention, to retrieve an estimated price for repairing the condition related to the diagnostic code in the systems of Shirane and Bourgian, in order to make the repair of the vehicle easier for the user, as taught by Moore.

4. Claims 30 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shirane and Bourgian in view of Hwang et al. (US006278919B1).

a. Per claims 30 and 39, the combination teaches the invention as explained in the rejection of claims 23 and 38. The combination does not teach presenting the information in an audio format. It would have been well known to one of ordinary skill in the art at the time of the invention that audio instructions can be used in addition to or as an alternative to text descriptions. Hwang is exemplary of a vehicle diagnostic system that uses both text and audio descriptions of the diagnostic information. It would have been obvious to one of ordinary skill in the art, at the time of invention, to provide an audio format of the text information, as is well known in the art, and exemplified by Hwang.

5. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shirane and Moore in view of Orr et al (US 6,836,238)

a. Per claim 42, the combination teaches the invention as explained in the rejection of claim 33. The combination does not name OBDII code as the diagnostic code. However, OBDII is an industry standard and would have been obvious to one of ordinary skill in the art at the time of the invention. Orr et al

discusses the fact that OBDII code is a standard within the industry. (Column 2, lines 7-19)


***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie A. Weiskopf whose telephone number is (571) 272-6288. The examiner can normally be reached on Monday-Thursday between 7:00 AM and 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MW

  
**THOMAS BLACK**  
**SUPERVISORY PATENT EXAMINER**